



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,682	06/27/2006	Jürgen Hofer	2003P06874WOUS	1185
22116 7590 05/18/2009				
SIEMENS CORPORATION				
INTELLECTUAL PROPERTY DEPARTMENT				
170 WOOD AVENUE SOUTH				
ISELIN, NJ 08830				
EXAMINER				
GIRMA, FEKADESEELASS				
ART UNIT		PAPER NUMBER		
2612				
MAIL DATE		DELIVERY MODE		
05/18/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/561,682

Applicant(s)

HOFER ET AL.

Examiner

Fekadeselassie Girma

Art Unit

2612

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF-100)
- Paper No(s)/Mail Date 22 December 2005
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. In the preliminary amendment filed on December 22, 2005, claims 1-7 have been cancelled and claims 8-20 been added. Therefore, claim 8-20 are currently pending.

Specification

2. The disclosure is objected to because of the following informalities: The complete meaning of the acronyms have to be stated at least once in the description.

An appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8-10, 12-14, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein et al. (Klein; US2002/0190956) in view of Binder (US 6208115).

As to claim 8, Klein discloses in Universal remote control with display and printer, having the claimed: a remote control 10; a control unit 101; a rechargeable battery read on ¶ 0043, Lines 1-12; the remote control 10; temporarily and removably fixed to a docking point read on ¶ 0100, Lines 8-12; docking point is configured to transmit information to the remote control read on ¶ 100, Lines 8-12; the information configured at least for triggering execution of the assignment mode on the remote control read on ¶ 0052, Lines 12-15 & ¶ 0060, Lines 4-5; a

rechargeable battery is charged by the remotely controllable device read on ¶ 0047, Lines 1-7. Klein does not disclose a rechargeable battery via an inductive power.

However, Binder, in energy transfer circuit for receiving electrical energy remotely via a contact-less charging unit, teaches the rechargeable battery via an inductive power read on Fig. 3, and Col. 4, Lines 44-53. The artisan recognizes the obviousness of charging of portable battery-operated devices (including those which normally use disposable batteries or which use rechargeable batteries and an AC adaptor charger) using an inductive recharging base without external charging contact points. This system enables the elimination of disposable batteries or, in the case of traditional rechargeable battery packs, of the exposed charging contacts which can easily become dirty and not function properly when exposed to sweating and dirty hands, etc. The recharging system and method permits portable devices to be easily recharged without the need for replacement batteries or charging contacts.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the battery substitute pack of Binder into Klein in order to use an inductive recharging base without external charging contact points.

As to claim 9, Binder further teaches a first transformer 18; a second transformer 21; the first and second transformer parts form a transformer when the remote control is docked at the docking point read on Col. 4, Lines 44-53. The artisan recognizes the obviousness of a charging unit 20 containing a primary coil 21 for producing magnetic flux which surrounds the charging unit 20. The primary coil 21 is connected to an oscillator 22 for supplying alternating current to the primary coil 21. The varying magnetic field induces an e.m.f. in the secondary coil 18 within the battery substitute pack 10 and gives rise to an alternating current which is rectified by the

AC/DC converter 26. The d.c. output from the AC/DC converter 26 is fed to the rechargeable cell 11 and is thereby recharged. In this way, the battery substitute pack 10 can be charged inductively without being conductively connected to the charging unit 20.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the battery substitute pack of Binder into Klein in order to charge the battery inductively without being conductively connected to the charging unit 20.

As to claim 10, Klein further teaches the remote control 10; configured to be fixed to the remotely controllable device read on ¶ 0047.

As to claim 12, Klein in view of Binder discloses all claim limitations. Klein further teaches information related to the assignment mode read on ¶ 0052, Lines 12-15 and ¶ 0060, Lines 4-5.

As to claim 13, Klein in view of Binder discloses all claim limitations. Klein further teaches information related to an initialization mode read on ¶ 0125.

As to claim 14, Klein in view of Binder discloses all claim limitations. Klein further teaches wherein the initialization mode is configured to trigger the execution of the assignment mode read on ¶ 0125, Lines 6-11.

As to claim 17, Klein further discloses a remote control 10; a control unit 101; the control unit configured to execute an assignment mode read on ¶ 0060; remotely controllable device met by consumer device (¶ 0047, Lines 21-25; a rechargeable battery ¶ 0043, Lines 1-5; a docking point read on ¶ 0100, Lines 8-12; the information configured at least for triggering execution of the assignment mode on the remote control and docking point is configured to transmit information to the remote control read on ¶ 0052, Lines 12-15 & ¶ 0060, Lines 4-5.

Klein does not disclose a rechargeable battery via an inductive power.

However, Binder, in Universal remote control to interface with computing device, teaches the rechargeable battery via an inductive power read on Fig. 3, and Col. 4, Lines 44-53. The artisan recognizes the obviousness of charging of portable battery-operated devices (including those which normally use disposable batteries or which use rechargeable batteries and an AC adaptor charger) using an inductive recharging base without external charging contact points. This system enables the elimination of disposable batteries or, in the case of traditional rechargeable battery packs, of the exposed charging contacts which can easily become dirty and not function properly when exposed to sweating and dirty hands, etc. The recharging system and method permits portable devices to be easily recharged without the need for replacement batteries or charging contacts.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the battery substitute pack of Binder into Klein in order to use an inductive recharging base without external charging contact points.

As to claim 18, the claim is interpreted and rejected as to claim 9.

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klein in view of Binder and further in view of Beart (US 2006/0043927).

As to claim 11, the first and second transformer parts each comprise a core with at least one of the cores including a permanent magnet read on ¶ 0033. The artisan recognizes the obviousness of the charging unit may be positioned so that it hangs vertically or horizontally to attached the unit to be charged at right position. The connecting means may be adapted to enable

the charging unit and the device to be mated in a large number of different relative orientations. Thus the user can "clip" the surface of the charging unit to the device easily. In this case, the surface may be incorporated directly into a mains-powered charging unit, providing a low-cost "no wires" easy-travel solution onto which a device can be conveniently pressed.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the Retention of rechargeable devices of Beart into Klein in view of Binder in order to provide a low-cost "no wires" easy-travel solution onto which a device can be conveniently pressed.

6. Claims 15, 16, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein in view of Binder and further in view of Zuehlke (US 5736795).

As to claim 15, Klein in view of Binder discloses all claim limitations except second coil is configured to carry an electrical load of controllable impedance and switched by a specific frequency. However, Zuehlke in, a method and apparatus for controlling the supply of alternating current to a load by means of a solid state switching circuit, teaches the second coil is configured to carry an electrical load of a controllable impedance read on Col. 3, Lines 37-43; the controllable impedance configured to be switched by a specific frequency read on Col. 5, Lines 33-40 and claim 8. It is obvious that to minimize the power diverted from the switched current to the control circuitry. One reason is that any power diverted from the switched current increases the effective voltage drop across load switch 20 when the load switch is in its low impedance state, and increases effective bleed current (leakage) when the load switch is in its high impedance state. The less the diverted power, the greater the range of load currents which

can be effectively switched without affecting operation of the controlled load.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the Solid state AC switch with self-synchronizing means for stealing operating power of Zuehlke into Klein in view of Binder in order to provide the greater the range of load currents, which can be effectively switched without affecting operation of the controlled load.

As to claim 16, Klein in view of Binder discloses all claim limitations except a filter. However, Zuehlke teaches a filter tuned to the specific frequency read on Col. 8, Lines 17-21 and Claim 8. It is obvious that a zener diode 63 connected across capacitor 62 limits the voltage there across to the voltage desired from storage circuit 60. A small capacitor 64 also connected in parallel with capacitor 62 provides high frequency filtering.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the Solid state AC switch with self-synchronizing means for stealing operating power of Zuehlke into Klein in view of Binder in order to provide a known frequency to control the switch.

As to claim 19, the claim is interpreted and rejected as to claim 15.

As to claim 20, the claim is interpreted and rejected as to claim 16.

Citation of Other Prior Arts

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chen discloses in Contact-less energy transfer apparatus (US 2003/0030342), Cheng

discloses in Contact-less power transfer (US 7525283), and Art discloses in Transmitter for radio-controlled toy (US 7288917).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fekadeselassie Girma whose telephone number is (571) 270-5886. The examiner can normally be reached on Monday thru Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)? If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/FG/

/Daniel Wu/
Supervisory Patent Examiner, Art Unit 2612